ABSTRACT OF THE DISCLOSURE

A transmission direction switching device for a half-duplex communication apparatus includes a data transmission detector connected to a universal asynchronous receiver transmitter (UART) via a sending line and a direction-switching rule executor connected to a half-duplex communication interface driver having a signal subtraction function via a direction control line. The data transmission detector detects any data to be sent and sends the data if such data exists. The direction-switching rule executor receives the data sent by the data transmission detector and sends a direction switching signal via the direction control line to the half-duplex communication interface driver to set a transmission direction of the half-duplex communication interface driver to a sending direction when the data received from the data transmission detector is a signal 0 or a low signal, or sends a direction switching signal via the direction control line to the half-duplex communication interface driver to set a transmission direction of the half-duplex communication interface driver to a receiving direction when the data received from the data transmission detector is a signal 1 or a high signal.